



Illinois Department of Natural Resources

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<http://dnr.state.il.us>

Pat Quinn, Governor
Marc Miller, Director

April 18, 2013

Mr. Denny Lorton
Zoning Officer
Cass County
100 East Springfield
Virginia, IL 62691

Mr. Joshua Ryals
Project Scientist
EBI Consulting, Inc.
5903 N Winthrop AVE #2W
Chicago, IL 60660

Re: Arenzville Telecommunications Tower and Facility – Arenzville
Endangered Species Consultation Program
Project Number: 1306503
County: Cass

Dear Mr. Lorton and Mr. Ryals:

The Department received a submission via the Department's Ecological Compliance Assessment Tool (EcoCAT) website, submitted by EBI Consulting, on behalf of the Cass County Zoning Department regarding this project located in Section 31, Township 17 North, Range 11 West for consultation in accordance with the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075.

The project involves the construction of a telecommunications facility, including a 265-foot self-support tower that will be located within a 100' x 100' leased area on agricultural land. It is our understanding that the field is currently being used as pasture for horses and has been planted in beans, hay and wheat in the past. The location of the proposed cell tower is northwest of Arenzville, on the west side of Arenz Road, and east of Arenzville Road.

The protected resource in the vicinity of the proposed project is the State-listed threatened **Illinois Chorus Frog**, *Pseudacris streckeri illinoensis*. Although not shown on the EcoCAT report due to buffer distances, records for State-listed threatened **Regal Fritillaries**, *Speyeria idalia*, and **Hall's Bulrush**, *Schoenoplectus hallii*, are located north and northwest of this project site.

The Department has completed its review of this project and determined that construction activities may have an adverse impact on the State-listed threatened Illinois Chorus Frog because this project may be within the footprint of where this species burrows and/or travels to and from upland areas and wetlands.

Illinois Chorus Frog

Associated with sandy soils, these frogs may be found in higher upland areas where there is both favorable geology and hydrology. This small amphibian (adults rarely exceed 1.5 inches in length) has a fossorial habitat, spending nearly all of its life in underground burrows deep in the soil below the frost line; how deep is unknown, as is how extensive an area one individual's burrow may be during a year. While breeding ponds comprise the essential reproductive habitat for this species, it spends very little of its time in them. Dispersed in sandy or friable soils, this species emerges in February and March after spring rains have filled ephemeral ponds. At these ponds, the species breeds and lays eggs, then returns to their upland burrows.

It is most easily identified in late winter and early spring after dark, when it emerges from sandy burrows and travels to nearby ephemeral vernal pools soon after ice-out, in late February or early March. Males then sing to attract mates, thus comprising the "chorus" from which the species derives its name. After a few weeks, adults return to their dispersed burrowing areas. If the vernal pools last long enough tadpoles metamorphose and disperse, leaving no trace of the species until the following breeding season. Such pools frequently are farmed wetlands and may be difficult to identify outside the breeding season or in drier years. In many places, roadside ditches may be an important component for successful breeding and recruitment.

Dispersal distances of around one kilometer have been reported, but few attempts to measure this activity have been made because of the cryptic nature of this species. The relative density of populations is also unknown. Their diet is believed to be mainly earthworms and soil insects.

The Department is concerned that excavation of sandy soils and digging of trenches could directly kill or injure frogs whose burrows may be located within the excavations. Chorus frogs may prove sensitive to the underground transmission of noise and vibrations from the construction activities or transmission lines; their primary prey species may be sensitive to noise and vibrations as well, resulting in alterations of the size and locations of suitable habitat actually occupied; movement of vehicles and machinery may compact soils and inhibit frog's movements to the ground surface and their ability to travel to and from breeding ponds; frogs could be entombed under the base of the tower; and frogs could also be directly killed by being run over by vehicles and machinery.

To minimize these impacts, the Department recommends that the County incorporate the following measures in its project authorization.

Recommendation 1. The Department recommends a biological survey for the presence of Illinois Chorus Frogs be conducted at the wetland located southwest of the proposed site and at the drainage ditch located west of the site. The best time to survey is March – April on warm (> ~ equal to 48 degrees) rainy nights. If surveys reveal the presence of this species (normally heard more easily than seen), the applicant should notify the Department, and develop measures to avoid or minimize adverse effects to this species.

Recommendation 2. Move the location of the cell tower to an area that does not have sandy soils.

Recommendation 3. No work should take place between March 1 – July 1, while adult and juvenile frogs are moving between breeding ponds and burrows.

Recommendation 4. All on-site personnel that will be involved in this project should be educated about the Illinois Chorus Frog. Color photos, and educational materials about its life history requirements, should be distributed and displayed at work zones. The frogs are usually only seen above ground (nocturnally) during the spring breeding season (February – April); they prefer to be below ground from May to January.

Recommendation 5. If Illinois Chorus Frogs are encountered during the construction phase, or during future maintenance activities, there is the potential for incidental take to occur. The IDNR District Heritage Biologist (Tim Kelley, 309543-3262) should then be immediately contacted. 'Take' means, in reference to animals and animal products, to harm, hunt, shoot, pursue, lure, wound, kill, destroy, harass, gig, spear, ensnare, trap, capture, collect, or to attempt to engage in such conduct. If a population is confirmed within or near the project, the developer should consider whether obtaining an Incidental Take Authorization from the Department's Office of Resource Conservation, pursuant to 520 ILCS 10/5.5, may be appropriate.

Recommendation 6. Equipment and vehicle staging areas should be located outside of sandy soils or drainage ditch areas. Matting should be used for additional compaction avoidance.

Recommendation 7. All trenches and excavations should be covered at the end of each work day and checked each morning for the presence of amphibians or reptiles.

Consultation on the part of the Department is completed. In accordance with 17 Ill. Adm. Code 1075.40(h), Cass County must notify the Department of its decision regarding these recommendations, whether they will:

- Allow the action to proceed as originally planned;
- Require the action to be modified per Department recommendations (please specify which measures if not all will be required); or
- Forgo the action.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resources review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected species are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Cordially,



Kathi Davis
Division of Ecosystems and Environment
Impact Assessment Section
Office of Realty & Environmental Planning
217-785-5500

Enclosure

Cc: Tim Kelley, IDNR/Region IV/Natural Heritage
Chris Phillips, Illinois Natural History Survey
John Tucker, Illinois Natural History Survey
Devon Pavlek, EBI Consulting, Inc.